

ENTERED

May 17, 2018

David J. Bradley, Clerk

UNITED STATES DISTRICT COURT
SOUTHERN DISTRICT OF TEXAS
HOUSTON DIVISION

DIGITAL DRILLING DATA SYSTEMS LLC, §

§

Plaintiff,

§

VS.

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CIVIL ACTION NO. 4:15-CV-02172

PETROLINK SERVICES INC. and

§

LEE GEISER

§

§

Defendants.

§

OPINION AND ORDER

Pending before the Court in the above-referenced cause of action are the following motions:

Filed by Plaintiff Digital Drilling Data Systems, LLC (“Digidrill” or “Plaintiff”):

1. Motion for Summary Judgment on Copyrightability (Doc. 93)
2. Motion for Partial Summary Judgment Against Defendants’ Affirmative Defense of Fair Use (Doc. 94)
3. Motion for Summary Judgment on Violation of the Digital Millennium Copyright Act Under 17 U.S.C. § 1201(a)(1)(A) (Doc. 95)
4. Motion for Summary Judgment on Copyright Infringement Under 17 U.S.C. § 501(a) (Doc. 96)

Filed by Defendant Lee Geiser, president and chief executive of Petrolink Services, Inc.:

5. Motion for Summary Judgment on Copyright and Unjust Enrichment Causes of Action (Doc. 70)

Filed by Defendants Petrolink Services, Inc. and Lee Geiser (“Petrolink” or “Defendants”):

6. Motion for Partial Summary Judgment on Anti-Circumvention Causes of Action under 17 U.S.C. § 1201(a)(1)(A) (Doc. 73)
7. Motion for Partial Summary Judgment on Copyright Infringement and Unjust Enrichment Causes of Action (Doc. 87)
8. Motion for Partial Summary Judgment on Damages Under 17 U.S.C. § 1201(a)(1)(A) (Doc. 89)

9. Motion for Partial Summary Judgment on Copyright Infringement and Unjust Enrichment Causes of Action (Doc. 90)
10. Motion for Partial Summary Judgment with Respect to Digidrill's Indirect Profits Damages (Doc. 106)

Having considered the Motions, all responses thereto, the relevant facts and the applicable law, the Court finds that Plaintiff's Motion for Summary Judgment on Copyrightability (Doc. 93) is granted in part and denied in part, Defendants' Motion for Partial Summary Judgment on Copyright Infringement and Unjust Enrichment Causes of Action (Doc. 87) is granted in part and denied in part, Defendants' Motion for Partial Summary Judgment on Copyright Infringement and Unjust Enrichment Causes of Action (Doc. 90) is granted in part and denied in part, Plaintiff's Motion for Summary Judgment on Copyright Infringement Under 17 U.S.C. § 501(a) (Doc. 96) is denied, Defendants' Motion for Partial Summary Judgment on Anti-Circumvention Causes of Action under 17 U.S.C. § 1201(a)(1)(A) (Doc. 73) is granted, Plaintiff's Motion for Summary Judgment on Violation of the Digital Millennium Copyright Act Under 17 U.S.C. § 1201(a)(1)(A) (Doc. 95) is denied, Defendant Lee Geiser's Motion for Summary Judgment on Copyright and Unjust Enrichment Causes of Action (Doc. 70) is denied, Plaintiff's Motion for Partial Summary Judgment Against Defendants' Affirmative Defense of Fair Use (Doc. 94) is denied as moot, Defendants' Motion for Partial Summary Judgment on Damages Under 17 U.S.C. § 1201(a)(1)(A) (Doc. 89) is denied as moot, and Defendants' Motion for Partial Summary Judgment with Respect to Digidrill's Indirect Profits Damages (Doc. 106) is denied as moot.

I. FACTUAL BACKGROUND

A. The DataLogger program

This case arises from alleged violations by Defendants Petrolink and its president Lee Geiser of United States copyright law. Specifically, Plaintiff alleges that Defendants Petrolink

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and Geiser (1) engaged in copyright infringement in violation of 17 U.S.C. § 501(a); (2) willfully violated the Digital Millennium Copyright Act (“DMCA”), 17 U.S.C. § 1201(a)(1) by circumventing a technological measure that effectively controlled access to Plaintiff’s copyrighted work; and (3) willfully violated the U.S. Copyright Act, 17 U.S.C. §§ 106(1), 501, and 1201(a)(1)(A) by knowingly circumventing the copyright protection measures embedded by Plaintiff for the purpose of extracting copyrighted data for its own commercial gain. Plaintiff further alleges that Defendant Petrolink was unjustly enriched by selling Plaintiff’s copyrighted data as its own and has garnered profits that rightfully belong to Plaintiff.

Plaintiff Digidrill is a leading provider of software and hardware to directional drilling companies in North America. Digidrill’s primary product is DataLogger, a “measuring while drilling” (“MWD”) software package popular among independent operators that assists oil and gas companies in their efforts to accurately steer drill bits into specific targets thousands of feet underground. It functions by providing drilling companies and well operators with accurate and real-time data that aids in successfully geosteering the drill bit.

DataLogger itself is an application consisting of software installed on a computer that works in conjunction with rig sensors and other tools located at the end of the drill pipe. Doc. 93 at 4–5. Digidrill has registered copyrights in the DataLogger software version 4.9, registration number TXU1842064, and version 5, registration number TXU1842092. First Amended Complaint (“FAC”) at 1–2.

When DataLogger is running on a computer, it has two primary processes: one is that the Interface Process receives input and performs calculations which indicate measurements of interest to the user; the other is that the Database Process stores all the raw data upon which the calculations are based as well as the manipulated data in an organized schema. The schema and

the data are available only to licensed users and only in measured pieces allowed by DataLogger. Doc. 95 at 1.

The Interface Process receives raw data gathered by MWD tools and sensors from deep in a well as a drill bit cuts through underground formations and performs calculations on the raw data to generate logs, accurate survey reports, corrected gamma readings, and other useful information on a real-time basis. Additionally, the Interface Process uses the host computer to stream the raw data to other entities working at the well site via a Wellsite Transfer Specification (WITS) feed for no additional license fee. Meanwhile, all the data, both raw and manipulated, is written onto, read from, retained, and stored on the Database Process.

Of the calculations made to correct the raw data, two are of particular importance in this lawsuit. First, Digidrill applies its own allegedly proprietary formula to raw gamma data received from the downhole gamma ray sensor, using a scaling process which combines multiple correction factors to correct and improve the usability of the raw gamma readings. The corrected gamma reading is stored in a field called “API” in a table called “GAMMA” in the DataLogger Database. Correct gamma readings are essential to properly geosteering a well into a targeted zone.

Second, Digidrill applies its own allegedly proprietary method to correct the depth measurements for the drill bit as it cuts through the formation. DataLogger uses a pre-configured, discretionary determination to record depth values at certain intervals, corrects the depth measurement using a method which allows for clean, even-stepped logs, then exports the downhole logging data into a “.LAS” file. The corrective step applied prior to exporting the data reduces the number of ways the measurement values can become skewed due to interpolation. The corrected depth measurement values are stored in the “MD” field in several different DataLogger Database tables, including ones called “WITS” and “GAMMA.” Licensed users of

the DataLogger Application have access to the corrected and accurate drilling data on a real-time basis, but the amended data has never intentionally been made available in real-time to any third parties such as Petrolink. Doc. 93 at 9.

In addition to performing corrective calculations on raw data, Digidrill also organizes and sorts the data into a logical schema so that the massive amount of data can be easily read and made use of by Digidrill customers. The Database schema includes 27 separate tables into which the data is sorted and organized, with an aggregate of 433 columns. There are endless ways to potentially organize the data, but the precise number of tables and fields in the schema developed by Digidrill are encoded within the DataLogger source code. Given the vast amount of data needing to be structured and organized into a usable, readable format, it took many years to develop the DataLogger Database schema into its current, user-friendly layout. *Id.* at 10. Digidrill implemented original nomenclature to designate each table and field and set up a system where the entries in different tables can relate to each other. *Id.* at 11. These relationships, which are programmed into the source code of DataLogger, allow Digidrill to develop an information hierarchy by connecting pieces of data that are related to each other in some abstract way.

The DataLogger Database was originally formatted to be opened using a program called Microsoft Access. As its schema became more complex, however, Digidrill decided to convert the Database from a Microsoft Access format to the Firebird Database format, a different format more capable of smoothly handling the DataLogger Database's complexity. While Microsoft Access and Firebird are different formats, Digidrill was able to maintain the general database schema in the new format, with a few minor changes. The schema of the DataLogger Database is generated by DataLogger's 3000 lines of source code using the Firebird Database Server

program upon installation of DataLogger by a user. Doc. 93 at 15. Data stored on the Firebird server is capable of being queried by DataLogger users with off-the-shelf software products. Doc. 73-1 at 1. As will be discussed further, this lawsuit arises because Petrolink managed to gain access to this data gathered by DataLogger and stored in the DataLogger Database, and then Petrolink used the data it acquired to advance its own business interests.

B. Petrolink's Alleged Hack

Petrolink is a competitor of Digidrill. Petrolink was developing a real-time drilling data visualization program and Digidrill was also planning to develop a similar type of program. In order to display a visualization of real-time data, Petrolink needed the actual, corrected data, which the DataLogger program had already determined and recorded. Therefore, rather than starting from scratch and gathering its own original drilling data, Petrolink used the corrected data stored in the DataLogger Database as input for its visualization program. Doc. 73-1 at 1. In order to obtain the real-time data it needed from Digidrill, Petrolink developed a program, also called the “hack,” “Scraper,” or “Rig WITSML” program, to break into the DataLogger Database and make copies of the accurate data in real-time, including portions of the database schema and the corrected survey and gamma data. *Id.*; Doc. 93 at 16. The parties dispute whether Petrolink accessed Digidrill's information in violation of the DMCA's anti-circumvention rule, how far Digidrill's copyright in DataLogger extends beyond the source code itself, and whether Petrolink's actions constitute copyright infringement.

II. STANDARD OF REVIEW

Summary judgment is appropriate under Rule 56 of the Federal Rules of Civil Procedure only “if the pleadings, depositions, answers to interrogatories, and admissions on file, together with affidavits, if any, show that there is no genuine issue as to any material fact and that the

moving party is entitled to judgment as a matter of law.” FED. R. CIV. P. 56. A dispute is genuine only if the evidence is such that a reasonable jury could return a verdict for the nonmoving party. *See Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 254, 106 S. Ct. 2505, 2513 (1986).

The party moving for summary judgment bears the initial burden of “informing the district court of the basis for its motion, and identifying those portions of [the record] which it believes demonstrate the absence of a genuine issue of material fact.” *Celotex Corp. v. Catrett*, 477 U.S. 317, 323, 106 S. Ct. 2548, 2553 (1986). The burden then shifts to the nonmoving party to establish the existence of a genuine issue for trial. *See Matsushita Elec. Indus. Co., Ltd. v. Zenith Radio Corp.*, 475 U.S. 574, 585–87, 106 S. Ct. 1348, 1355–56 (1986); *Wise v. E.I. Dupont de Nemours & Co.*, 58 F.3d 193, 195 (5th Cir. 1995). The parties may satisfy their respective burdens by tendering depositions, affidavits, and other competent evidence. *Topalian v. Ehrman*, 954 F.2d 1125, 1131 (5th Cir. 1992). “Supporting and opposing affidavits shall be made on personal knowledge, shall set forth such facts as would be admissible in evidence, and shall show affirmatively that the affiant is competent to testify to the matters stated therein.” FED. R. CIV. P. 56(e).

The Court will view the summary judgment evidence in the light most favorable to the non-movant. *Rosado v. Deters*, 5 F.3d 110, 122 (5th Cir. 1993). The non-movant must respond to the motion by setting forth particular facts indicating that there is a genuine issue for trial. *Mississippi River Basin Alliance v. Westphal*, 230 F.3d 170, 174 (5th Cir. 2000). “After the non-movant has been given the opportunity to raise a genuine factual issue, if no reasonable juror could find for the non-movant, summary judgment will be granted.” *Id.*

III. ANALYSIS

A. Copyrightability

It is undisputed that Digidrill's copyright registrations cover the DataLogger source code; the parties do dispute, however, how far the copyright in the source code extends and what it actually covers beyond the source code itself. Specifically, the parties dispute whether it covers the DataLogger database, the database schema, and the corrected data output.

Defendants Petrolink and Lee Geiser filed a motion for summary judgment, Doc. 87, with respect to the causes of action for copyright infringement, Counts 1 and 3 the First Amended Complaint ("FAC"). In that motion, they argue that summary judgment is proper on the copyright infringement causes of action for two reasons: (1) Digidrill's copyright registrations are only in the DataLogger computer program itself and do not extend to cover the measurements entered by the user, the schema created by the software, or the data output; and (2) Digidrill is not asserting a copyright in the works at issue in this case, the Firebird databases themselves. In other words, Defendants argue that no copyright infringement occurred because the copied works are not subject to copyright in the first place.

Plaintiff also filed a motion for summary judgment on the issue of copyrightability, Doc. 93, arguing that both the database schema and the corrected data output are subject to copyright. Plaintiff contends that Digidrill owns the copyright in the DataLogger Database because it is created by DataLogger, and because the DataLogger Database is generated by the copyrighted DataLogger source code, it is a nonliteral element of the copyrighted DataLogger program subject to copyright. Defendants assert that the database is primarily a result of user input, but Plaintiff argues that even though MWD users input information into DataLogger's wizard screen, the database schema and corrected data reflect the content of the DataLogger program code and fall within Digidrill's copyright.

Furthermore, while Defendant maintains that the actual data output represents uncopyrightable facts, Plaintiff argues that the data output is the product of DataLogger's unique and creative formulas and contains a creative spark, rendering it subject to copyright. Plaintiff likens the output to "predictions," which courts have found to be copyrightable. *See CCC Information Services, Inc. v. MacLean Hunter Market Reports, Inc.*, 44 F. 3d. 61, 67 (2d Cir. 1994) (holding that a company's prediction of future facts is copyrightable).

i. The Firebird databases

As a preliminary matter, Defendants' assertion that Plaintiff attempts to claim that its copyright extends to the source code of the Firebird software and databases is incorrect. *See* Doc. 87 at 22. As Plaintiff states in its response, Digidrill has never alleged infringement of the Firebird Database software. Doc. 110 at 22. Firebird is merely a template-like application used by DataLogger to serve as a repository for displaying and saving the DataLogger database. *Id.* at 23. When DataLogger creates a database, it opens the Firebird database server to embody the DataLogger Database created from DataLogger's source code. *Id.* at 23–24. The Firebird application itself does not contain any of Digidrill's schema; rather, Firebird creates the database files exclusively at the direction of the DataLogger source code, which is the sole source of the DataLogger Database schema. *Id.* at 24–25.

The true issue at hand regarding copyrightability, therefore, does not concern the Firebird database, but relates to Petrolink's alleged infringement and copying of Digidrill's DataLogger Database schema and data. Therefore, the Court will consider the parties' arguments relating to the DataLogger Database and whether Digidrill's copyright extends to: (1) the DataLogger Database schema; and (2) the data logged by the DataLogger program and stored in the DataLogger Database via the Firebird application.

ii. *The DataLogger Database schema*

As previously stated, Digidrill has registered copyrights in the DataLogger software versions 4.9 and 5. The boundaries of copyright in a computer program have been explained by the Fifth Circuit as follows:

It is settled that computer programs are entitled to copyright protection. This protection extends not only to the “literal” elements of computer software—the source code and object code—but also to a program’s non-literal elements, including its structure, sequence, organization, user interface, screen displays, and menu structures. To assess a claim of software infringement, we have generally endorsed the “abstraction-filtration-comparison” test first outlined by the Second Circuit in *Altai* and refined by the Tenth Circuit in *Gates Rubber Co. v. Bando Chemical Industries, Ltd.* The *Altai* test deploys a three-step procedure to assess whether protectable expression has been improperly copied. First, at the abstraction stage, the court “dissect[s] the allegedly copied program's structure and isolate[s] each level of abstraction contained within it.” Second, the court filters out unprotectable expression by examining the structural components at each level of abstraction to determine whether they can be protected by copyright. Copyright protection does not extend to ideas, processes, facts, elements dictated by considerations of efficiency, elements required by factors external to the program itself, or items taken from the public domain. With these nonprotectable elements filtered out, there remains a “core of protectable expression,” and we must then “determine whether the defendant's program misappropriated substantial portions of the plaintiff's program.”

General Universal Systems, Inc. v. Lee, 379 F.3d 131, 142–43 (5th Cir. 2004) (per curiam) (citations omitted).

The parties dispute whether the database schema is a protectable literal or nonliteral element of the copyrighted DataLogger source code. Plaintiff cites an opinion from a district court in Washington, D.C. to support its contention that database schema generated by a program are considered nonliteral elements of the program because they are embodied within the source code of the program:

A computer program is “a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result.” 17 U.S.C. § 101. Copyright protection “extends to all the copyrightable expression embodied in the computer program.” United States Copyright Office, Circular 61, Copyright Registration for Computer Programs (2006). Copyright protection extends not only to the literal elements of a computer program—source code and object code—but also to the program's nonliteral elements, which are “the products that are generated by the code's interaction with the computer hardware and operating program(s).” *MiTek Holdings*, 89 F.3d at 1555 n.15; *see also General Universal Sys., Inc. v. Lee*, 379 F.3d 131, 142 (5th Cir. 2004) (finding that copyright protection of a computer program extends to nonliteral elements, including “structure, sequence, organization, user interface, screen displays and menu structures”); *Whelan Assoc., Inc. v. Jaslow Dental Lab., Inc.*, 797 F.2d 1222, 1248 (3d Cir. 1986) (holding that copyright protection of computer programs “extend beyond the programs' literal code to their structure, sequence, and organization”).

DSMC, Inc. v. Convera Corp., 479 F. Supp. 2d 68, 81 (D.D.C. 2007) (finding that a database schema was “embodied in” a copyrighted computer program).

Plaintiff argues that because the DataLogger source code calls a custom script which creates and generates the database schema in each new database file, the schema is embedded in Digidrill's source code and exists in the database files independently of any raw data from the well site. Doc. 110 at 24. Thus, DataLogger's database schema is covered by its copyright of the source code as a nonliteral element embodied in the code. Additionally, Digidrill argues it does not need individual copyright restrictions in the DataLogger databases to sue Petrolink for copying the DataLogger source code of the schema and corrected data which are embodied in the source code.

In response, Petrolink insists that Digidrill's copyright registrations are only on the DataLogger computer program itself and, as a matter of law, do not extend to the databases created by the code. Defendants cite to a case from the Northern District of California, *Design Data Corporation v. Unigate Corporation*, 63 F. Supp. 3d 1062, 1068–69 (N.D. Cal. 2014),

affirmed in part, 847 F. 3d 1169 (9th Cir. 2017) (reversed on other grounds), to argue that the all output from a computer program constitutes “data” not protected by a copyright in the computer program itself. Doc. 102 at 53–54. In that case, on appeal, the Ninth Circuit affirmed the district court’s finding but applied the test from *Torah Soft Ltd. v. Drosnin*, 136 F. Supp. 3d 276 (S.D.N.Y. 2001), which states that if the copyrighted program does “the lion’s share of the work” in creating the output, and “the user’s role is so ‘marginal’ that the output reflects the program’s contents,” then the copyright protection may indeed extend to the program’s output. Defendants contend that even using the less stringent *Torah Soft* test, the database is not copyrightable because the user’s role in creating the database is not marginal.

Defendants also argue that the database cannot be copyrighted because it does not pass the originality test in *Feist Publications, Inc. v. Rural Telephone Service Co.*, 499 U.S. 340, 345–48, 111 S. Ct. 1282, 113 L.Ed.2d 358 (1991), the parameters of which were discussed by the Seventh Circuit in deciding whether a database had the requisite originality to be subject to copyright:

Copyright law unlike patent law does not require substantial originality. *Feist Publications, Inc. v. Rural Telephone Service Co.*, 499 U.S. 340, 345–48, 111 S. Ct. 1282, 113 L.Ed.2d 358 (1991). In fact, it requires only enough originality to enable a work to be distinguished from similar works that are in the public domain, *Bucklew v. Hawkins, Ash, Baptie & Co.*, 329 F.3d 923, 929 (7th Cir. 2003); *Alfred Bell & Co. v. Catalda Fine Arts, Inc.*, 191 F.2d 99, 102–03 (2d Cir. 1951), since without some discernible distinction it would be impossible to determine whether a subsequent work was copying a copyrighted work or a public-domain work. This modest requirement is satisfied by Market Drive because no other real estate assessment program arranges the data collected by the assessor in these fields grouped into these 34 categories, and because this structure is not so obvious or inevitable as to lack the minimal originality required, *Key Publications, Inc. v. Chinatown Today Publishing Enterprises, Inc.*, 945 F.2d 509, 513–14 (2d Cir. 1991), as it would if the compilation program simply listed data in alphabetical or numerical order. *Feist Publications, Inc. v. Rural Telephone Service Co.*, *supra*, 499 U.S. at 362–64. The obvious orderings,

the lexical and the numeric, have long been in the public domain, and what is in the public domain cannot be appropriated by claiming copyright. Alternatively, if there is only one way in which to express an idea—for example, alphabetical order for the names in a phone book—then form and idea merge, and in that case since an idea cannot be copyrighted the copying of the form is not an infringement. *Ets-Hokin v. Skyy Spirits, Inc.*, 225 F.3d 1068, 1082 (9th Cir. 2000); *Kregos v. Associated Press*, 937 F.2d 700, 705–07 (2d Cir. 1991). That is not the situation here.

Assessment Techs. of WI, LLC v. WIREdata, Inc., 350 F.3d 640, 643 (7th Cir. 2003).

Here, the database schema passes both the *Torah Soft* test and the *Feist* originality test. In terms of the user’s role, it is true that the program relies on data input from the user in order to create the data output. However, the schema itself is not a result of user input; rather, it is an organizational structure that has been pre-formulated and exists in the source code independently of user input. The user input merely fills in the blanks of the schema. Furthermore, the amount of data organized by the schema is so vast, and there are so many possible different ways to arrange and coordinate the data, the Court finds that the database schema satisfies the level of originality required by *Feist*. The data is not organized in an obvious manner, such as alphabetically or numerically, but in a unique, creative, relational expression of ordering. *See, e.g., Snap-on Bus. Sols. Inc. v. O’Neil & Assocs., Inc.*, 708 F. Supp. 2d 669, 685 (N.D. Ohio 2010) (finding a database’s link structure represents a unique organization of data). For example, Digidrill selects and sorts the raw and corrected data into particular tables and fields which are “linked together in unique ways” that are creative and discretionary. Doc. 93 at 21.

In conclusion, considering the nature of its structure, organization, interface and display, the database schema fits the classification of a “nonliteral element” of the copyrighted DataLogger software. *See Gen. Universal Sys., Inc. v. Lee*, 379 F.3d 131, 142 (5th Cir. 2004). Therefore, because the database is original, and based on the broad understanding of the

nonliteral elements of computer programs, the Court finds that the schema generated by the DataLogger source code is covered by Digidrill's DataLogger copyright.

iii. The DataLogger data

As for the data itself, Plaintiff argues that because the source code applies certain significant and unique calculations to the data entered by the user, the data output, or the “corrected data,” reflects the content of the DataLogger code and falls within Digidrill's copyright as well. Doc. 110 at 28. Plaintiff clarifies that it is not claiming a copyright in the data input by the MWD users or in the raw data input gathered by MWD sensors and tools. *Id.* Rather, Digidrill alleges that Petrolink (1) created copies of the copyrighted DataLogger database schema in the operating computer's Random Access Memory (“RAM”) every time its hacking program issued a query to Digidrill's database; (2) embodied a copy of a portion of the DataLogger schema in its hacking program's source code; and (3) copied Digidrill's allegedly copyrighted and proprietary corrected data into memory every time the hacking program was run. *Id.* at 28–29. Digidrill seeks to apply the *Torah Soft* test to the data output, arguing that DataLogger did the “lion's share” of the work in generating the data output because the users did not input any portion of the formulas applied by DataLogger to the raw data inputs. Therefore, argues Plaintiff, the data output is also a nonliteral element of the copyrighted source code.

Defendants do not dispute the fact that they copied the corrected data output, but they challenge the notion that the data is capable of being copyrighted in the first place. Defendants present three arguments in defense of their position. First, Defendants contest Plaintiff's application of the *Torah Soft* test. Defendants assert that the data logged by the DataLogger program and stored within the databases is not copyrightable because the MWD Company user plays a “significant” and not a “marginal” role in producing the data output, since no output can

be produced without the user providing raw measurement inputs into the program. Doc. 126 at 15.

Second, Defendants point out that regardless of whether the corrected data constitutes a nonliteral element of the copyright, the data content is non-copyrightable because it is purely factual. It is well established that there can be no valid copyright in facts. *Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 344, 111 S. Ct. 1282, 1287, 113 L. Ed. 2d 358 (1991) (“That there can be no valid copyright in facts is universally understood.”). Defendants interpret the data output to be scientific measurements and values calculated based on those measurements using standard equations; in other words, the corrected data comprises uncopyrightable “facts.”

Additionally, relying on an unpublished Northern District of California opinion, *Atari Games Corp. v. Nintendo of Am., Inc.*, No. C 88-4805 FMS, 1993 WL 214886, 1993 U.S. Dist. LEXIS 8183 (N.D. Cal. Apr. 15, 1993), Defendants argue that a copyright over a computer program does not extend to the “program data which is stored somewhere in the memory.” To this argument, Plaintiff responds that according to *Atari*, data output is not categorically non-copyrightable; rather, the Court must focus on “‘what’ the [output] is, and then determine whether it falls within one of the statutory categories for copyrightable subject matter.” *Id.* at *3.

To support its contention that the corrected data values contained in the DataLogger databases are not mere facts, but creative, copyrightable works, Plaintiff states that the raw data inputted by MWD users is “creatively manipulated” by Digidrill’s “proprietary, unique formulas and calculations contained in the copyrighted DataLogger source code, performed in the DataLogger Interface Process, and embodied in each database file.” Doc. 110 at 24–25. Plaintiff states that though the raw data represent pre-existing facts, the corrected data reflect the “professional judgment and expertise” of Digidrill. Doc. 93 at 22.

It is undisputed by the parties that the raw data initially entered into the DataLogger program is collected by MWD tools and sensors deep down in a well. The sensors gather information relevant to the surrounding underground formations and send the raw data to the DataLogger Interface Process. The raw data, however, is not useful to users in its raw form because much of the downhole information gathered is inaccurate and needs to be corrected. For example, the raw gamma values are inaccurate because some gamma radiation is absorbed by the housing and drill collar that the tool sits in. Doc. 93 at 6–7; Second Benson Decl. at ¶ 15.

Therefore, Digidrill has developed formulas to correct these inaccuracies in the raw data so that the corrected data can be useful to the users. The specific formulas in question applied by DataLogger to the raw data include the following: The API (gamma) calculation is based on a standard gamma calculation and correction method wherein the raw, measured gamma value is multiplied by two factors: a Collar Attenuation Factor and a scaling factor, inputs which represent measurements of the gamma radiation properties of the downhole rock formation. Doc. 126 at 16–17. Another measurement in question, MD (measured depth), is calculated by reading the depth measurement from a downhole sensor, determining if the actual depth is close to a desired depth logging interval, then rounding the depth measurement to the nearest logging interval. Doc. 126 at 16. Digidrill chooses the interval and determines in its discretion which data values to record at depth measurements versus time measurements based on the needs of its customers. Doc. 111 at 28.

Upon careful review of these formulas, the Court finds that despite the judgment exercised by Digidrill in selecting which data values to record, the resulting calculated values, including MD and API, express geometric relationships that indicate facts about the location of the drill bit and geological formations. This factual information represents empirical realities,

not creative values. Copyrighted works must be original and “no one may claim originality as to facts.” *Feist*, 499 U.S. at 347.

Because the corrected data in the database reflect concrete, factual, numerical measurements, the Court agrees with Defendants regarding the copyrightability of the data outputted by DataLogger. The corrected data calculations are indeed “mere facts” not subject to copyright. In sum, the Court finds that though the DataLogger database schema is subject to Digidrill’s copyright, the actual data entries contained in the database are not copyrightable.

Accordingly, Defendants’ Motion for Summary Judgment (Doc. 87) is granted in part and denied in part, and Plaintiff’s Motion for Summary Judgment (Doc. 93) is granted in part and denied in part.

B. Copyright Infringement

Both parties also filed motions for summary judgment on the issue of copyright infringement: Defendants filed a Motion for Partial Summary Judgment on Copyright Infringement and Unjust Enrichment Causes of Action (Doc. 90) and Plaintiff filed a Motion for Summary Judgment on Copyright Infringement Under 17 U.S.C. § 501(a) (Doc. 96). Substantial portions of both motions address the issue of copyrightability, which has been discussed and decided by the Court above. Having established the extent of Plaintiff’s copyright, namely, that it covers the schema as a nonliteral element of the source code but does not extend to cover the corrected data, the Court moves on to consider remaining issues about whether the copyright as construed by this Court was infringed by Defendants.

The main unresolved issue in these motions is whether or not Plaintiff has presented evidence that Defendants’ allegedly infringing works are “substantially similar” to Plaintiff’s copyrighted works, which is required to be shown in order to find copyright infringement has

occurred. The law dictates that to find liability for copyright infringement, the plaintiff must prove: (1) ownership of the copyrighted material and (2) copying by the defendant of constituent elements of the work that are original. *Computer Management Assistance Co. v. Robert F. DeCastro, Inc.*, 220 F.3d 396, 400 (5th Cir. 2000); *see also Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340, 361 (1991). The first prong has already been addressed in this Opinion. The second prong, “[t]he factual question of whether the defendant actually used the copyrighted material[,] can be inferred by showing proof of access to the copyrighted work and probative similarity between the defendant’s work and the copyrighted work.” *Id.*, *citing Eng’g Dynamics*, 26 F. 3d at 1340–41.

However, even once it has been established that copying occurred, there is still another step required in the infringement analysis, because “[n]ot all copying. . . is copyright infringement.” *Eng’g Dynamics, Inc. v. Structural Software, Inc.*, 26 F.3d at 1340–41, *citing Feist*, 499 U.S. at 361, 111 S. Ct. at 1296. For the copying to be legally actionable, a court must “determine whether there is substantial similarity between the two works.” *Id.*; *Computer Mgmt. Assistance Co. v. Robert F. DeCastro, Inc.*, 220 F.3d 396, 400 (5th Cir. 2000) (“A copy is legally actionable if (1) the alleged infringer actually used the copyrighted material to create his own work, and (2) substantial similarity exists between the two works.”). To answer this second question of whether “substantial similarity” exists between the copyrighted work and the allegedly infringing work, “a side-by-side comparison must be made between the original and the copy to determine whether a layman would view the two works as ‘substantially similar.’” *Bridgmon v. Array Sys. Corp.*, 325 F.3d 572, 576–77 (5th Cir. 2003) (citations omitted); *see also Kay Berry, Inc. v. Taylor Gifts, Inc.*, 421 F.3d 199, 208 (3rd Cir. 2005) (Substantial similarity is determined “without the aid of expert testimony, but with the perspective of the lay observer.”).

i. Defendants' copying

The parties do not dispute the contention that Defendants' hacking program copied some portion of Plaintiff's copyrighted database schema. The following occurrences are agreed to be true by the parties: Petrolink installed its hack program on the computers of Digidrill customers at more than 300 different well sites. The hack read and copied parts of five specific tables within the DataLogger Database. Specifically, portions of 17 of the 22 fields contained within those five tables were copied. In total, the Petrolink hacking program copied and used between 4% and 7% of the available fields in the entire schema. Doc. 96 at 17–18.

In Plaintiff's words, Petrolink's hack program copied the structure and organization of the database in three ways. First, when the hack was run, it issued a query to the DataLogger Database in order to access the desired fields. Each time the hack program queried the database, the queried portions of the schema were reproduced into the Random Access Memory ("RAM") of the user's computer. *Id.* at 18–20. Second, the Petrolink hack program copied the schema into its own memory as part of its normal operation with the Firebird server. *Id.* at 20–21. Third, the source code for the hack copied the schema of the DataLogger database every time a query was generated. *Id.* at 21.

Though Defendants characterize and describe the copying in different terms, there is no genuine issue of material fact regarding the events that transpired. The true issue is whether the second prong of the test, "substantial similarity," has been shown. Therefore, the Court will consider the question of whether the two works¹ were substantially similar.

¹ There is some confusion in the parties' motions about what the "two works" in question are. For purposes of this copyright infringement analysis, the "original works" include the copyrighted DataLogger source code and the copyrighted DataLogger Database schema. The allegedly "infringing works" include the copies of the DataLogger Database schema made into the RAM of the users' computers, the copies of the schema made into the memory of the hack program, and the copies of the schema made into the source code of the hack program. The Court compares the original works to the infringing works to determine whether they are substantially similar to each other.

ii. *Substantial similarity*

Defendants' argument at this stage focuses on the proposition that its program copied such a tiny amount of copyrighted material from Plaintiff relative to the whole database schema that there is no evidence of substantial similarity between Plaintiff's database schema and Defendants' copies of the database schema. Defendants explain:

Petrolink only selects (i.e., receives and copies into the PetroVault database) data from 4% of the available columns in the entire Firebird database in Data Logger version 5.19—3 of 14 (21%) of the columns within the GAMMA table, 8 of 33 (24%) of the columns within the SURVEY table, 4 of 10 (40%) of the columns in the WITS table, and 2 of 10 (20%) of the columns in the WITSFIELD table. In Data Logger version 5.4, Petrolink only selects (i.e., receives and copies into the PetroVault database) data from 5% of the available columns in the entire Firebird Database.

Doc. 90 at 40–41. From Defendants' perspective, its hacking program replicated a very small percentage of the overall copyrighted work, meaning that each copied work as a whole bears no substantial similarity to the original work as a whole.

Defendants cite to case law where other circuits held that such slight proportions of copying do not constitute “substantial similarity” under the *Computer Management Assistance* test. *See Nihon Keizai Shimbun, Inc.*, 166 F. 3d 65, 71 (2d Cir. 1999); *Schoolhouse, Inc. v. Anderson*, 275 F. 3d 726, 730 (8th Cir. 2002). Additionally, Defendants argue there is no substantial similarity between the databases because the tables in the Petrolink database contain a different structure from those in Datalogger's database. Thus, Petrolink argues, based on this miniscule amount of copying, it is impossible for Digidrill to meet its burden of showing substantial similarity, and there can be no finding of copyright infringement. *See Computer Management Assistance Co. v. Robert F. DeCastro, Inc.*, 220 F.3d 396, 400 (5th Cir. 2000).

Additionally, Defendants argue that there is no substantial similarity between its database and the DataLogger database because the three database tables in Petrolink's database contain a different structure from the ones in the Plaintiff's database. Doc. 103 at 45. Defendants quote Plaintiff's other motion for summary judgment, where Plaintiff states: "The schema of the Petrolink database is unique, having a completely different structure than the DataLogger Database. Thus, the schemas of the tables used in Petrolink's database 'bear no resemblance to the schemas of the tables within Data Logger.'" Doc. 93 at 16.

Plaintiff responds by bringing the focus away from Petrolink's storage database and back to the actual source code of Petrolink's hack program, reiterating that Petrolink has infringed Digidrill's copyright in DataLogger in three separate and distinct ways, none of which involve an examination of Petrolink's own database: first, by copying the schema generated by DataLogger into the hack program's memory each time the database was queried; second, by creating a copy of DataLogger's schema in the operating computer's RAM each time the database was queried; and third, by copying DataLogger's exact schema in the source code of the hacking program. Doc. 111 at 22.

In other words, while Defendants focus on comparing their own database to Plaintiff's database, Plaintiff argues that the issue in this case is that Petrolink directly and identically copied DataLogger's Database schema, a protectable element of its DataLogger source code, into its hack's own *source code* and into the RAM of the computer operating the hack; Petrolink's database itself is irrelevant. Doc. 111 at 29. Thus, according to Plaintiff, both elements of copying are satisfied as to the DataLogger database schema because the hacking program developed by Petrolink incorporated the DataLogger database schema into its source code and made an exact copy of it with every query. Doc. 96 at 24.

Plaintiff asserts there is direct evidence of these types of copying and points to depositions from Mr. Pha and Mr. Navratil. During his deposition, Mr. Pha stated that the Petrolink hacking, or “Scraper” program uses “the structure and organization embedded within DataLogger in order to query and extract data from DataLogger.” Doc. 96 at 25; Ex.1, Pha Tr. at 28:17–25, 18:1–9. He also “confirmed that he typed the exact information from the database’s structure and organization into the Scraper’s code, and that the Scraper embodies knowledge of the database’s structure.” *Id.* Plaintiff argues that this means the schema of the DataLogger Database is embedded within the Scraper’s source code and is copied every time a query is executed. The copying of the exact schema was necessary to query DataLogger. *Id.* at 27. In a different deposition, Mr. Navratil agreed that every time the Scraper executed the “fbDataReader” command, a copy of the queried portion of the database schema was read into the RAM of the computer on which the Scraper was running. *Id.* at 25.

Plaintiff also presents circumstantial evidence of the alleged copying. Circumstantial evidence of copying requires showing that the infringer (1) had access to the work in question and (2) that the two works are “probatively” similar. *Seastrunk v. Darwell Integrated Tech.*, 2008 U.S. Dist. LEXIS 26498 at *20 (N.D. Tex. Mar. 28, 2008). Plaintiff argues that access is demonstrated in an email from Mr. Pha to Mr. Geiser which includes an exact copy of the schema. Probative similarity is shown when there are similarities between two works that “would not be expected to arise independently in the two works and that therefore might suggest that the defendant copied part of the plaintiff’s work.” *Positive Black Talk, Inc. v. Cash Money Records*, 394 F.3d 357, 370 (5th Cir. 2004). Plaintiff points out similarities between the two programs such as that the Scraper’s source code contains DataLogger’s exact schema and that the two database schemas share names and data.

iii. Court's Decision

Though Defendants admit to copying some of Plaintiff's DataLogger Database schema, Defendants maintain that Digidrill has still failed to prove copyright infringement because there is no evidence of substantial similarity between the original work and the copied works. Plaintiff responds that it is undisputed that Petrolink copied DataLogger's Database schema and Petrolink misframes the analysis by prompting comparisons between the DataLogger database and its own database, which is irrelevant to Petrolink's liability for copyright infringement. Plaintiff emphasizes that Petrolink's hack "(1) identically copied portions of the schema into the Hack's source code, (2) identically copied portions of the schema into the RAM of the computer executing the Hack, and (2) identically copied portions of the schema into the Hack's own memory." Doc. 119 at 5.

The Court understands Plaintiff's argument and agrees that Defendants' arguments relating to the layout of its own database are not relevant. Yet, beyond arguing that direct copying occurred, Plaintiff does not engage with the question of "substantial similarity" and does not demonstrate how or why the copying is legally actionable. *See* Doc. 96 at 27 (arguing only that the copied elements were "substantially similar" because they were directly copied). By Plaintiff's logic, Petrolink's copy of the DataLogger schema was substantially similar *because* it was a direct and identical copy. *See* Doc. 96. However, not all copying is legally actionable, even if it involves direct reproduction of a copyrighted work. *See Bridgmon v. Array Sys. Corp.*, 325 F.3d at 576–77 (5th Cir. 2003) (finding that the plaintiff needed to produce evidence of substantial similarity even when there was evidence of direct copying of the copyrighted material); *Creations Unlimited v. McCain*, 112 F.3d 814, 816 (5th Cir.1997) (per curiam); *Attia v. Soc'y of the New York Hosp.*, 201 F.3d 50, 53–54 (2d Cir.1999)); *King v. Ames*, 179 F.3d 370,

376 (5th Cir. 1999). A finding of substantial similarity depends on a “comparison of the works.” *Folio Impressions, Inc. v. Byer California*, 937 F.2d 759, 766 (2d Cir. 1991). Plaintiff did not present evidence on this point beside the fact that portions of its schema were directly copied. Therefore, Plaintiff has not met its burden of showing substantial similarity. *See Armour v. Knowles*, No. CIV.A. H-05-2407, 2006 WL 2713787, at *2 (S.D. Tex. Sep. 21, 2006), *aff’d on other grounds*, 512 F.3d 147 (5th Cir. 2007), *citing R. Ready Prods., Inc. v. Cantrell*, 85 F.Supp.2d 672, 682 (S.D. Tex. 2000) (“The Court assumes for purposes of the motions for summary judgment that Plaintiff can establish factual copying. . . Therefore, Plaintiff must then prove that the copyrighted work and the allegedly infringing work are substantially similar.”).

Accordingly, Plaintiff’s motion for summary judgment on copyright infringement, Doc. 96, is denied.

Furthermore, though the question of substantial similarity is typically left to the impressions of a fact finder, summary judgment can be granted in favor of the defendant if the court concludes, after conducting a side-by-side comparison of the two works at issue, “that no reasonable juror could find substantial similarity of ideas and expression.” *See General Universal*, 379 F.3d at 142.

Here, Defendants presented sufficient and convincing evidence that their work was not substantially similar to the copyrighted work. Considering the source code of the RIG WITSML program relative to the DataLogger Database schema, the two works are quite different in multiple ways, including in their content, function, purpose, and utility, and no ordinary observer would regard the works as the same. *Cf. R. Ready Prods., Inc. v. Cantrell*, 85 F. Supp. 2d 672, 683 (S.D. Tex. 2000), *quoting Arica Institute, Inc. v. Palmer*, 970 F.2d 1067, 1072 (2d Cir.1992) (“Two works are substantially similar where ‘the ordinary observer, unless he set out to detect

the disparities, would be disposed to overlook them, and regard [the] aesthetic appeal [of the two works] as the same.”). As for the copies made to the RAM and to the hack program’s memory, Defendants show that they did not copy the Database schema in full, but rather copied only a small portion of the total number of columns—17 of 433—contained in the DataLogger database. Doc. 125 at 33. Moreover, each alleged copy made in RAM and memory is of a single database table, and contains only certain columns from the copied table; taken as a whole, these copies are not substantially similar to Plaintiff’s copyrighted work. *See Compaq Computer Corp. v. Ergonome, Inc.*, 137 F. Supp. 2d 768, 779 (S.D. Tex. 2001) (“[S]ubstantial similarity requires that the copying is quantitatively and qualitatively sufficient to support the legal conclusion that infringement (actionable copying) has occurred.”).

Having carefully considered the documentary evidence presented by both sides, including the relatively small percentage of the DataLogger database that was copied as well as the vastly different structure of the database tables copied into RAM and memory as compared to the DataLogger Database schema in whole, the Count concludes that Petrolink’s hack program is not substantially similar to the DataLogger Database schema. *See* Doc. 90 at 40–41.

Accordingly, the portion of Defendants’ motion for partial summary judgment on copyright infringement addressing substantial similarity, Doc. 90, is granted.

C. Anti-Circumvention under 17 U.S.C. § 1201(a)(1)(A)

The parties have filed cross motions for summary judgment on the issue of whether the Defendants violated the anti-circumvention portion of the Digital Millennium Copyright Act (“DMCA”), 17 U.S.C. § 1201(a)(1)(A): Defendants filed their Motion for Partial Summary Judgment on Anti-Circumvention Causes of Action under 17 U.S.C. § 1201(a)(1)(A) (Doc. 73) and Plaintiff filed its Motion for Summary Judgment on Violation of the Digital Millennium

Copyright Act Under 17 U.S.C. § 1201(a)(1)(A) (Doc. 95). The relevant facts concerning how Petrolink accessed Digidrill's materials are agreed upon; the parties are, however, at odds over whether the methods used to access the copyrighted material constitute "circumvention" in violation of the statute.

The DMCA provides: "No person shall circumvent a technological measure that effectively controls access to a work protected under this title." 17 U.S.C. § 1201(a)(1)(A). "[T]o 'circumvent a technological measure' means to descramble a scrambled work, to decrypt an encrypted work, or otherwise to avoid, bypass, remove, deactivate, or impair a technological measure, without the authority of the copyright owner." 17 U.S.C. § 1201(a)(3)(A). "A technological measure 'effectively controls access to a work' if the measure, in the ordinary course of its operation, requires the application of information, or a process or a treatment, with the authority of the copyright owner, to gain access to the work." 17 U.S.C. § 1201(a)(3)(B).

i. Factual background regarding the hacking program

The relevant, undisputed facts are as follows: The DataLogger software is installed on each licensed user's computer. To run the software, the user must insert a dongle into the USB port of the computer; DataLogger will not operate without the dongle inserted. The dongle is only provided to users licensed to use DataLogger and provides access to the Interface Process, where data is inputted and outputted. Doc. 95 at 2–3. DataLogger's second process, the Database Process, which generates and stores the data, is also protected by a password. However, the typical DataLogger user does not access the Database Process directly, but via the Interface Process. *Id.* at 3. The DataLogger Database Process uses the Firebird Database Server to embody its database. *Id.* at 6.

Plaintiff contends that access to DataLogger and the Database Process is protected by three technological measures. First, it is protected by “obfuscation architecture.” This means that the DataLogger application is structured such that its only “point of entry” is via the Interface Process, which requires insertion of the dongle. *Id.* at 7–8. The second technological protection measure is the dongle itself. The dongle can only be obtained by purchasing a license to DataLogger and it is embedded with a key corresponding to the DataLogger programming code. *Id.* at 9. The third technological protection measure is the internal password-protection mechanism which controls entry into the Database Process. The password is not intended to be entered by users, but rather is an internal mechanism designed only to be used by the program itself; the password is embedded within the software. *Id.* at 11.

Petrolink’s hacking program gained access to DataLogger’s Database Process and used the corrected data stored therein to provide an accurate real-time data visualization service to its customers. In its pursuit of this corrected, accurate data held by DataLogger, Petrolink obtained a laptop running the DataLogger software from one of DigiDrill’s customers, with the customer’s permission. The laptop included the protection dongle. Using that computer, Petrolink was able to access the Database. Furthermore, Petrolink discovered that the internal password protecting the Database Process was a default password issued by Firebird that had not been changed. *Id.* at 14.

After Petrolink gained access to the DataLogger Database Process, it developed its own hacking program, also called “Rig WITSML,” which was installed on computers running DataLogger so that Petrolink could have access to the corrected data in real time. The hack accesses the database using the internal-facing password, and, as discussed previously,

periodically copies information from the database for use in its own program, targeting data from the Survey table, the Gamma table, and the WITS table. *Id.* at 16.

Though both parties state that the series of events which occurred are undisputed, unsurprisingly, each side has a different interpretation of these facts. According to Plaintiff, its copyrighted work was protected by three “technological measures,” all of which “effectively control[led] access” to the copyrighted work and all of which were circumvented by Defendant with each query issued by Petrolink’s program. Every ten seconds Petrolink’s hack sent three queries to the database, one for each of the tables containing data it sought, and thus, according to Plaintiff, each and every time this happened all three technological protection mechanisms were circumvented. Doc. 95 at 16. Plaintiff argues that the hack (1) circumvented the obfuscation architecture by avoiding or bypassing the Interface process; (2) circumvented the dongle lock by avoiding or bypassing it; and (3) circumvented the password lock by applying a key guessed by “brute force” from a program other than the Interface Process. *Id.*

Defendant Petrolink counters that it only accessed the work via one of those measures, the internal-facing password guarding the database, and it did not “circumvent” that measure in violation of the DMCA. Additionally, it argues that the other technological measures mentioned by Plaintiff, the dongle and the obfuscation software were not circumvented and did not effectively control access to the copyrighted work.

ii. Circumvention

According to the undisputed facts, once Defendants learned that the data they sought was stored on a database hosted by Firebird, they discovered through online research that there was a default username and password through which Firebird databases could be accessed. Defendants tested the default log-in credentials, and since Plaintiff had not updated its username and

password, Defendants were able to obtain access. Though their access was unauthorized by Plaintiff, it did not constitute “circumvention” as defined by the DMCA.

Many different district courts have held that using the correct username and password to access a copyrighted work, even without authorization to do so, does not constitute circumvention under Section 1201(a) of the DMCA. *E.g., I.M.S. Inquiry Management Systems, Ltd. v. Berkshire Info. Systems, Inc.*, 307 F. Supp. 2d 521, 532 (S.D.N.Y. 2004); *Egilman v. Keller & Heckman, LLP*, 401 F. Supp. 2d 105, 112 (D.D.C. 2005); *Joint Stock Co. Channel One Russia Worldwide v. Infomir LLC*, No. 16-CV-1318, 2017 WL 696126, at *18 (S.D.N.Y. Feb. 15, 2017) (“[T]here is no liability under § 1201(a)(1)(A) where the defendant misuses a password, or otherwise uses ‘deceptive’ methods (as opposed to its own technology) to circumvent the technology that the copyright owner relied on for protection.”).

Plaintiff argues that the way that Defendants guessed the password can be classified as a “brute force attack” prohibited by the DMCA. The Court disagrees that this was a brute force attack. A brute force attack is when password combinations are guessed at random until the right one is found; here, Defendants simply entered the commonly-known Firebird default credentials and were granted access to the Firebird database since the default username and password had not been modified by Plaintiff. Doc. 101 at 19. Accordingly, the Court finds that by using the default username and password to access the DataLogger database, Defendants did not descramble a scrambled work, decrypt an encrypted work, avoid, bypass, remove, deactivate, or impair a technological measure, and therefore did not by that act “circumvent a technological measure” in violation of 17 U.S.C. § 1201(a)(1)(A).

iii. Effective control

Additionally, Plaintiff argues that Defendant circumvented two other protective technological measures: the dongle and the user interface/obfuscation architecture. In response, Defendant disputes that it circumvented those measures and also asserts that those two measures did not effectively control access to the database. Again, the Court agrees with Defendants and finds that those two measure did not effectively control access to the database under the meaning of effective control found in 17 U.S.C. § 1201(a)(3)(B).

The obfuscation architecture was not circumvented and does not control access to the Firebird database where DataLogger's data was stored. *See* Doc. 101 at 26. On the contrary, it was established and known that the DataLogger data files were stored in the Firebird shared library which could be accessed independently from the DataLogger software. *Id.* at 26–29. Because the copied files are accessible via the Firebird database without requiring interaction with the obfuscation architecture, the obfuscation architecture was neither circumvented in violation of the DMCA nor did it effectively control access to the work copied by Defendants.

Similarly, while the dongle may control access to the DataLogger software, it does not control access to the Firebird Foundation database where the DataLogger schema and data were stored. As Defendants explain, “[e]ven if the dongle is unplugged. . . [the files] can still be accessed and queried on the MWD computers, including by the Rig WITSML program.” Doc. 101 at 31. The Firebird software is separate from the DataLogger software and does not rely on the dongle to allow access to it. *Id.* Therefore, the Court finds that the dongle was neither circumvented in violation of the DMCA nor did it effectively control access to the work copied by Defendants.

iv. Court's Decision

After having carefully considered both parties' arguments, the Court agrees with Defendants. Access to the copyrighted work in question is not "effectively controlled," under its statutory meaning, by the dongle or the obfuscation architecture. Furthermore, Defendants did not circumvent a technological measure by entering the correct username and password to access the Firebird database server.

Accordingly, Defendants' Motion for Partial Summary Judgment on Anti-Circumvention Causes of Action under 17 U.S.C. § 1201(a)(1)(A) (Doc. 73) is granted and Plaintiff's Motion for Summary Judgment on Violation of the Digital Millennium Copyright Act Under 17 U.S.C. § 1201(a)(1)(A) (Doc. 95) is denied.

D. Unjust Enrichment

Finally, in its First Amended Complaint, Plaintiff claims that by selling Digidrill's allegedly copyrighted data as its own, Defendants have been "unjustly enriched and [have] garnered profits that rightfully belong to Digidrill." Doc. 21 at ¶ 75. Defendants Petrolink and Lee Geiser move for summary judgment, Docs. 87 & 90, arguing that copyright law preempts this claim and also as a matter of law it cannot be proven. Defendant Lee Geiser also moves separately to dismiss the claim on summary judgment, Doc. 70, arguing preemption and that there is no evidence that he personally was "enriched." Doc. 70 at 9.

Under the two-prong analysis provided by the Fifth Circuit, copyright law preempts an unjust enrichment claim when two conditions are satisfied: "First, the work in which the right is asserted must come within the subject matter of copyright as defined in sections 102 and 103 [of the Copyright Act]. Second, the right that the author seeks to protect must be equivalent to any of the exclusive rights within the general scope of copyright as specified by section 106 [of the Copyright Act]." *Alcatel USA, Inc. v. DGI Techs., Inc.*, 166 F.3d 772, 785–86 (5th Cir. 1999).

The Court has found that the data at issue is factual and does not fall within the subject matter of copyright as defined in Sections 102 and 103 of the Copyright Act. Therefore, Plaintiff's claim for unjust enrichment is not preempted by copyright law.

In the alternative, Defendants argue that Plaintiff's unjust enrichment claim should nevertheless be dismissed on summary judgment because Plaintiff cannot satisfy the elements of an unjust enrichment claim as a matter of law. Doc. 90 at 44. The Court disagrees that this claim can be resolved by summary judgment.

A person is unjustly enriched when he obtains a "benefit from another by fraud, duress, or the taking of an undue advantage." *Heldenfels Bros., Inc. v. City of Corpus Christi*, 832 S.W.2d 39, 41 (Tex. 1992). Defendants argue that if the Court finds that the data is copyrightable, as it has been found here, Plaintiff cannot make a claim for unjust enrichment. However, as Plaintiff argues, the data does not have to be copyrighted in order for Plaintiff to allege unjust enrichment; unjust enrichment occurs when a person has wrongfully obtained a benefit or has passively received one which it would be unconscionable to retain. *Stewart Title Guar. Co. v. Mims*, 405 S.W.3d 319, 339 (Tex. App.—Dallas 2013, no pet.). Defendants Petrolink and Lee Geiser have not presented summary judgment evidence showing that as a matter of law Plaintiff cannot prove unjust enrichment.

Accordingly, since there remains a genuine issue of material fact as to whether unjust enrichment occurred, the portions of Defendants' motions for summary judgment on unjust enrichment, Docs. 70, 87, and 90, are denied.

E. Remaining Motions for Summary Judgment

The remaining motions for summary judgment address Defendants' fair use defense (Doc. 94), Lee Geiser's liability for copyright infringement (Doc. 70), Plaintiff's damages under 17 U.S.C. § 1201(a)(1)(A) (Doc. 89), and Plaintiff's indirect profits damages (Doc. 106).

Based on the foregoing, those motions, or the parts of them that have not been ruled on above, are hereby denied as moot.

IV. CONCLUSION

In summary, the Court concludes that Plaintiff's copyright extended beyond the DataLogger source code itself to cover the database schema, but nevertheless, no copyright infringement occurred. Furthermore, there was no violation of 17 U.S.C. § 1201(a)(1)(A). Accordingly, it is hereby

ORDERED that Defendants' Motion for Partial Summary Judgment on Anti-Circumvention Causes of Action under 17 U.S.C. § 1201(a)(1)(A) (Doc. 73) is GRANTED;

Plaintiff's Motion for Summary Judgment on Violation of the Digital Millennium Copyright Act Under 17 U.S.C. § 1201(a)(1)(A) (Doc. 95) is DENIED;

Plaintiff's Motion for Summary Judgment on Copyrightability (Doc. 93) is GRANTED in PART and DENIED in PART;

Defendants' Motion for Partial Summary Judgment on Copyright Infringement and Unjust Enrichment Causes of Action (Doc. 87) is GRANTED in PART and DENIED in PART;

Defendants' Motion for Partial Summary Judgment on Copyright Infringement and Unjust Enrichment Causes of Action (Doc. 90) is GRANTED in PART and DENIED in PART;

Plaintiff's Motion for Summary Judgment on Copyright Infringement Under 17 U.S.C. § 501(a) (Doc. 96) is DENIED; and

Defendant Lee Geiser's Motion for Summary Judgment on Copyright and Unjust Enrichment Causes of Action (Doc. 70) is DENIED in part. It is further

ORDERED that Plaintiff's Motion for Partial Summary Judgment Against Defendants' Affirmative Defense of Fair Use (Doc. 94) is MOOT;

Defendants' Motion for Partial Summary Judgment on Damages Under 17 U.S.C. § 1201(a)(1)(A) (Doc. 89) is MOOT;

and Defendants' Motion for Partial Summary Judgment with Respect to Digidrill's Indirect Profits Damages (Doc. 106) is MOOT.

SIGNED at Houston, Texas, this 16th day of May, 2018.

A handwritten signature in black ink, appearing to read "Melinda Harmon", is written over a horizontal line.

MELINDA HARMON
UNITED STATES DISTRICT JUDGE